

was administered to a sample of male university students aged 18-26 years. Patient characteristics measured included education, race, major, marital/relationship status and insurance status. Awareness regarding HPV and the vaccine, and attitude towards willingness to get vaccinated, perceived risks of being infected with HPV, and benefits of the vaccine were measured using a 5 point Likert scale. Coded data were analyzed by conducting descriptive and correlation analysis using SAS 9.2. **RESULTS:** A total of 203 completed surveys were obtained. Mean (\pm SD) age of participants was 21.56 (\pm 2.44) years. Mean awareness scores were high for HPV (3.89 \pm 1.34) and HPV vaccine (3.55 \pm 1.30). Mean attitude scores were somewhat mixed for willingness to get vaccinated (2.89 \pm 1.10), benefit of vaccination (3.18 \pm 1.04), and at risk of getting HPV (3.15 \pm 1.21). There was no significant co-relationship between attitude and awareness variables. Willingness to get vaccinated was negatively correlated with perceived risk ($r=0.15$, $p<0.05$) and vaccination benefit ($r=0.34$, $p<0.05$). **CONCLUSIONS:** Despite awareness regarding HPV and HPV vaccine a large proportion of the cohort was not willing to get vaccinated. This may be due to the perception of not being at risk of getting infected and not having a clear understanding of the benefits of vaccination.

PIN60

EPIDEMIOLOGY OF PNEUMOCOCCAL DISEASES IN MEXICO IN PATIENTS OLDER THAN 50 YEARS OLD

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OBJECTIVES: Despite its importance, there are few published studies describing the burden of pneumococcal disease in elderly population of developing countries. The goal of this study is to estimate the burden of pneumococcal diseases in Mexico in people ≥ 50 years. **METHODS:** Mortality due to pneumonia, bacteremia, meningitis and acute otitis media (AOM) in patients ≥ 50 years was extracted from Mexican MoH official databases (2009 data, ICD-10 classification). Population structure was extracted from the Mexican official source. Incidence and prevalence of pneumococcal disease were extracted from published sources. Mortality was adjusted according to the proportion of deaths attributable to pneumococcal disease (from literature). Data were analyzed with DISMOD II software (to produce consistent estimates for epidemiological parameters of pneumococcal disease). Presence and type of comorbidities were taken in account: low risk: without comorbidities; mild risk: congestive heart failure, valvular disease, valvular disorders, pulmonary hypertension, peripheral vascular disease, hypertension, ischemic heart disease, stroke, COPD, diabetes mellitus, chronic renal failure, chronic liver disease, use of tobacco and alcohol abuse; high risk: comorbidities associated to HIV/AIDS, lymphoma, tumors, splenic disease and sickle cell anemia. **RESULTS:** For 2009 were estimated 12,798 cases of meningitis, where 86% of patients had low risk and 13% had moderate risk of comorbidity, mortality rate was 1.6 per 100,000 inhabitants. For outpatient pneumonia 4,275 cases were estimated, 53% low risk and 46% mild risk. For inpatient pneumonia 31,631 cases were estimated, 78% low risk and 21% mild risk, mortality rate: 7.8 per 100,000. For AOM 9,817 cases were estimated (100% low risk). Meanwhile, 611 cases of bacteremia were estimated, 98% had low risk and 2% had mild risk. **CONCLUSIONS:** The availability of reliable epidemiological parameters regarding pneumococcal disease in Mexican population over 50 could support the evaluation of current prevention policies, as well as the design of more efficient ones.

PIN61

BACTERIOLOGY AND INAPPROPRIATE EMPIRIC THERAPY IN MIXED COMPLICATED SKIN AND SKIN STRUCTURE INFECTIONS

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OBJECTIVES: Complicated skin and skin structure infections (cSSSI) are a common reason for hospitalization. Inappropriate empiric therapy (IAET) for cSSSI prolongs hospital stay. Patients with a mixed cSSSI (MSI, gram positives [GP] and gram negatives [GM] present) are at an increased risk for receiving IAET. We set out to examine the bacteriology and components of IAET coverage in MSI. **METHODS:** We conducted a single-center retrospective cohort study of patients hospitalized April 2006 to December 2007 with a cSSSI. IAET was defined as failure to deliver an antibiotic with in vitro activity against the offending pathogen(s) within 24 hours of presentation. **RESULTS:** Of the 717 patients hospitalized with a cSSSI, 158 (22%) received IAET; 68 (9.5%) had a MSI. Among all MSI, most frequently isolated pathogens were methicillin-resistant *S. aureus* (MRSA) ($n=23$, 33.8%), *Streptococcus* sp. ($n=22$, 32.4%) and *P. aeruginosa* ($n=21$, 30.9%). IAET was noted in 26 (38.2%) MSIs. Both appropriate GP and GN coverage were missing in 7 (26.9%) cases. While among all MSIs treated with IAET *Streptococcus* sp. coverage was never missing, treatment for MRSA was absent in 3 (11.5%) cases. Most frequently missing coverage was for GN ($n=18$, 69.2%), with *P. aeruginosa* untreated in 6 (23.1%). GP coverage was absent in 15 (57.7%), most frequently for vancomycin-resistant *Enterococcus* sp. (VRE) ($n=9$, 34.6%). **CONCLUSIONS:** In this single-center study, patients with a MSI were at high risk for IAET. Coverage was more frequently left out for GN than for GP, with *P. aeruginosa* and VRE frequently remaining untreated empirically.

PIN62

EFFECTIVENESS OF TEXT MESSAGE REMINDERS FOR IMPROVING VACCINATION APPOINTMENT ATTENDANCE AND SERIES COMPLETION AMONG ADOLESCENTS AND ADULTS

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OBJECTIVES: In the absence of reminders, multi-dose vaccine completion rates for adolescents and adults are low. Human papillomavirus (HPV) vaccine completion, for example, is 32% among US adolescents. In the IMPACT trial (Improving Patient Adherence through Clinic-initiated Text messages), we examine the efficacy of automated text message-based reminders in improving series completion rates among patients ≥ 9 years old who have begun, but not completed, one or more multi-dose vaccine series: hepatitis B (HBV) or HPV. **METHODS:** In this multi-center randomized controlled trial, consenting participants ($N=334$) were assigned during a clinical visit to receive either 1) text message-based reminders before their next dose, or 2) traditional appointment reminders. In group 1, text messages were delivered to patients' or parents' cellular telephones using a web-based application that automatically sends text reminders prior to appointments dates entered by clinical staff. We evaluated the association between treatment group and appointment attendance and vaccine series completion. **RESULTS:** Among all participants, HPV or HBV series completion within 6 months of enrollment was higher for those receiving a text messages (39.8% vs. 32.0%), but with meaningful effect modification by age. Among adult patients, those who received a text were more likely to complete their vaccine series for HPV or HBV (37.5% vs. 24.2%; risk ratio [RR] = 1.55). Among adult patients who initiated the HPV series alone, text messages doubled the rate of vaccine completion (37.5% vs. 18.5%; RR = 2.03). Text messaging was not effective for increasing series completion among adolescent participants. Text messaging improved overall appointment attendance at 3 of the 4 clinical sites, but the differences were not statistically significant. **CONCLUSIONS:** In this pilot study, text messaging initiated by the clinical office demonstrated improved multi-dose vaccine series completion among adult patients and showed promising trends for reducing appointment no-show rates.

PIN63

HIV TREATMENT GUIDELINE COMPLIANCE AMONG TREATMENT-NAÏVE MISSISSIPPI MEDICAID ADULT BENEFICIARIES

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OBJECTIVES: Research has consistently demonstrated the effectiveness of antiretroviral therapy (ART) in reducing HIV-related morbidity and mortality. Current guidelines for the treatment of HIV identify specific combination regimens with medications from two different drug classes. The objective of this study was to assess compliance with these guidelines among treatment-naïve individuals. **METHODS:** Mississippi Medicaid prescription claims data (1/2008 10/2011) were analyzed for beneficiaries who met eligibility criteria: age >17 , not pregnant, and enrolled in Medicaid for at least three months prior to the index prescription date. Beneficiaries were considered treatment-naïve and starting initial therapy if no ART claims existed for at least three months prior to the first ART claim. We defined a guideline-adherent ART regimen as use of a minimum of three drugs including two nucleoside reverse transcriptase inhibitors (NRTIs) in combination with one protease inhibitor (PI) or one nonnucleoside reverse transcriptase inhibitor (NNRTI) between July 2008 and December 2010. Between January 2010 and November 2011, a guideline-adherent ART regimen could also include two NRTIs in combination with one integrase inhibitor. **RESULTS:** A total of 604 beneficiaries met inclusion criteria. Between July 2008 and December 2009, 39.8% and 25.5% of beneficiaries were on an NNRTI-based regimen and PI-based regimen, respectively. Additionally, 4.4% met more than one guideline simultaneously. Approximately 30.3% were prescribed a medication regimen that was not in accordance with guidelines. Between January 2010 and October 2011, 38.8% and 24.1% of beneficiaries were on an NNRTI-based regimen and PI-based regimen, respectively. Additionally, 5.3% met more than one guideline simultaneously. Approximately 25.5% were prescribed a medication regimen that was not in accordance with guidelines. **CONCLUSIONS:** During the study period, the majority of beneficiaries were in accordance with treatment guidelines for initial therapy for treatment-naïve patients with minimal temporal changes across the three primary combination regimens.

INFECTION – Research on Methods

PIN64

BURDEN OF PNEUMOCOCCAL INFECTION IN ADULTS IN COLOMBIA

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OBJECTIVES: *Streptococcus pneumoniae* is responsible for more than a million deaths globally each year, most of them in the developing world. The burden of *S. pneumoniae* infections is highest in children. Estimates in adult population are uncommon. Our objective was to determine the burden of disease, measured in disability adjusted life years (DALYs), associated with pneumococcus in adults (older than 15 years of age) in Colombia in 2008. **METHODS:** Using different data sources (national mortality records, official registries, published literature and local epidemiological data) we estimated incidence, mortality and disability due to bacterial pneumonia, bacterial meningitis and bacteremia of any cause for year 2008, and the fraction of these that can be attributed to *S. pneumoniae*. We used Murray's standard methodology to estimate DALYs (including age-weighting and discounting at 3%). **RESULTS:** There were 6488, 1276 and 452 deaths due to pneumonia, bacteremia and meningitis, respectively. Incidence rates for these same 3 diseases (before adjusting for underreporting, that has been estimated in 65%) were 233,814; 999 and 960, respectively. A total of 63,463 DALYs are lost due to *S. pneumoniae* in Colombians age 15 or over (55,362 DALYs, 87%, due to premature death). Most of the burden (51,848 DALYs, 81.7%) is due to pneumonia, followed by meningitis (9,241